

**ABSTRACT****Drug Utilization Study of Neuromuscular Blocking Agents on Surgical Patient in Integrated Surgical Center Building Dr. Soetomo Hospital Surabaya**

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General anaesthesia is a choice for patient ongoing surgery. These days, the safe technique of so-called 'balanced anaesthesia' is largely used. In this technique small of anaesthetics is given to produce unconsciousness, an analgesic is administered to abolish pain, and a neuromuscular blocking drugs is injected in order to prevent reflex muscle movement. These drugs inhibit neuromuscular transmission from nerve to muscle by competitively blocking the binding of acetylcholine to its postsynaptic receptors at the motor end plate, thereby causing paralysis of the muscle.

This study was aimed to examine utilization of neuromuscular blocking agent, to identify onset of action, and to identify drug related problem (DRP) that consist of doses and interactions neuromuscular blocking agents. Data was collected with time limited sampling in the period April 2016 until May 2016 in Integrated Surgical Center Building Dr. Soetomo Hospital Surabaya. The inclusion criteria were the patient using neuromuscular blocking agents and patients ongoing operation. This methodology has been approved by ethics committee of Dr. Soetomo Hospital Surabaya.

The results of observational study on 221 patients showed neuromuscular blocking agents that uses in this study were rocuronium (56,8%), atracurium (40,5%) and vecuronium (2,7%). These neuromuscular blocking agents used as monotherapy and combination. There were any drugs related problem such as intubation doses that given to patient where the patient got lower dose (4,1%) or higher dose (18,5%) and drug interaction. The onset of action has linkages with clinical data of patient.

**Keywords :** neuromuscular blocking agent, surgery patient, onset of action, drug utilization study